THE EVALUATION OF THE WISCONSIN CLASSIFICATION SYSTEM AS IT APPLIES TO THE LOS ANGELES PROBATION POPULATION

FINAL REPORT ON NATIONAL INSTITUTE OF CORRECTIONS GRANT #89C02GHE1

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Executive Summary

Nine years ago, the Los Angeles County Probation Department adopted the Wisconsin Probation Classification System -to determine the levels of supervision to be afforded to probationers. Since then, the county has seen a steady increase in its population as well as its ethnic diversity. This demographic change has also affected the Department's probation caseloads and triggered our concern on the continuing use of the same classification system.

In this study, we found that overall the Wisconsin system did a fair job in differentiating high risk probationers from those of medium or low risk in their probation outcomes. However, the system failed to provide a consistent prediction across different ethnic groups.

Our conclusion was primarily based upon the chi-square test. We focused on how the risk levels or scores were related to the major indicators of probation outcomes. The statistical analysis revealed a clear pattern between the risk levels and probation outcomes. The higher the risk level or scores the higher the rate in felony arrests, imprisonment and formal court hearings. Low (Minimum) risk probationers consistently had a 'higher rate in successful completion of their probation terms with less imprisonment than the high (Maximum) and medium risk groups. They also had the lowest number of formal court hearings and felony arrests during their probation period among all subjects. However, they had a substantially higher rate of desertion than

the other two groups, which could have resulted from their minimum level of supervision.

The same pattern was found in all the three major ethnic groups of the sample, Caucasian, Hispanic and Black. When the risk level went up, so did the number of arrests, formal court hearings and imprisonment; and the number of successful completion went down.

Our statistical tests showed that most of the differences are very likely real. However, the medium risk probationers within the Caucasian group had a much higher rate of imprisonment and desertion, and a lower rate of completed probation terms than both the low risk and high risk groups, when they were expected to do better than the high risk group and worse than the low risk group.

When we compared the probation outcomes across the ethnic groups, we found that the Wisconsin system was not consistent in its prediction, especially for the high risk group. Ideally, if the Wisconsin scale offers valid measurement, probationers of the same risk level should have the same or similar outcomes regardless of their racial background. Our study found that the high risk Caucasian probationers had a significantly lower number of arrests and formal court hearings than the high risk hispanic and black probationers. The high risk Caucasian probationers also had a higher rate of successful completion of probation terms. In other words, given that the level of supervision remained constant across the three racial groups, many of the

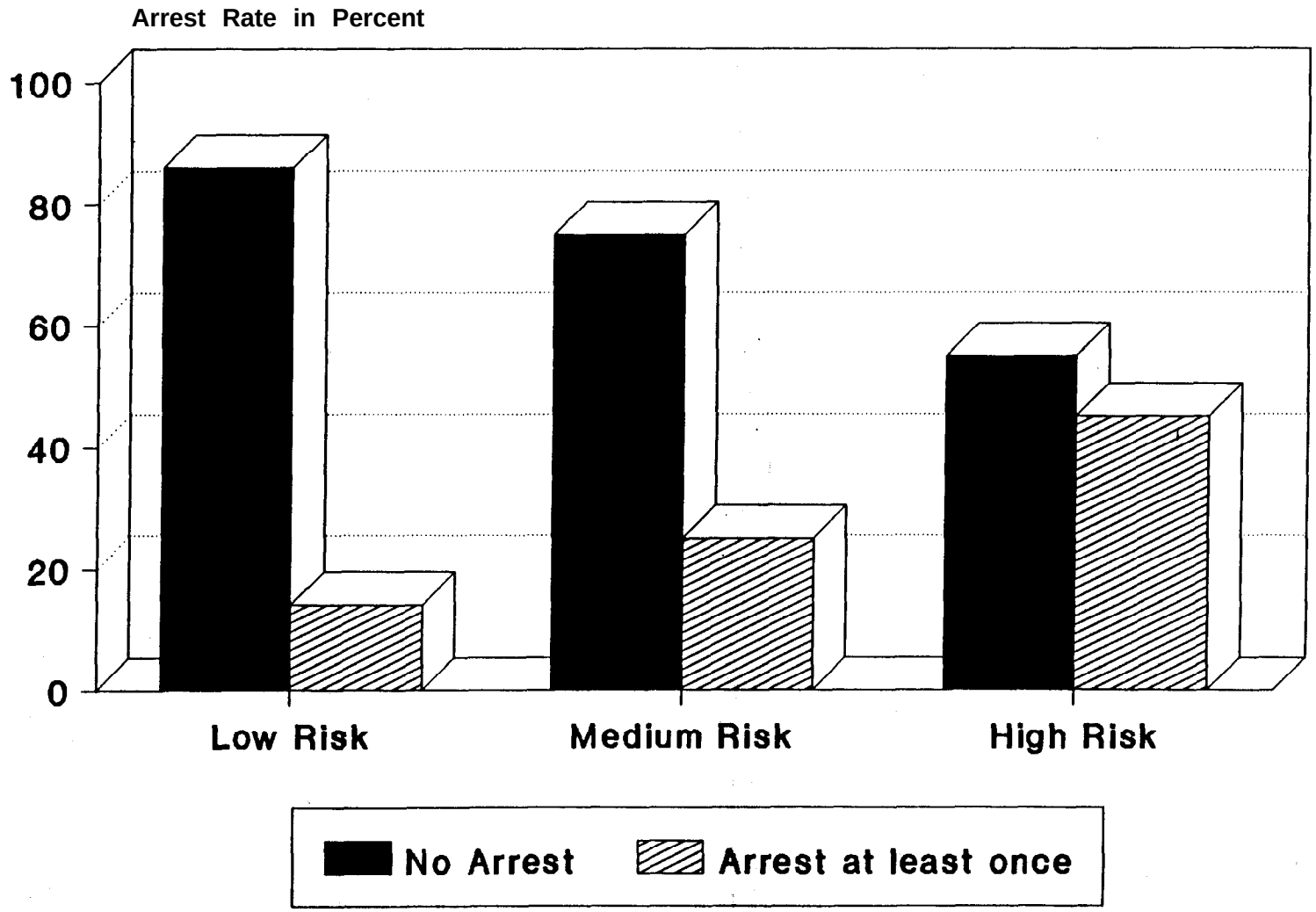
high risk Caucasians could have been classified to lower risk levels and given less supervision.

The scale seemed to best fit the black probationers, whose probation outcomes best resembled the sample pattern. The other two groups all had unusual patterns. For instance, among the hispanics, the differences between the risk levels and the number of arrests were not significant, and their number of formal court hearings was much higher than that of the other two ethnic groups.

The cross-ethnic discrepancies of probation outcomes within same risk levels suggest that the Wisconsin system may not work well in this multi-ethnic and highly criminogenic metropolitan area. Apparently the Wisconsin system could not measure the variation caused by the cultural and ethnic differences in the probation population--such as neighborhood attributes, housing crowdedness, gang prevalence, ethnic subcultures.

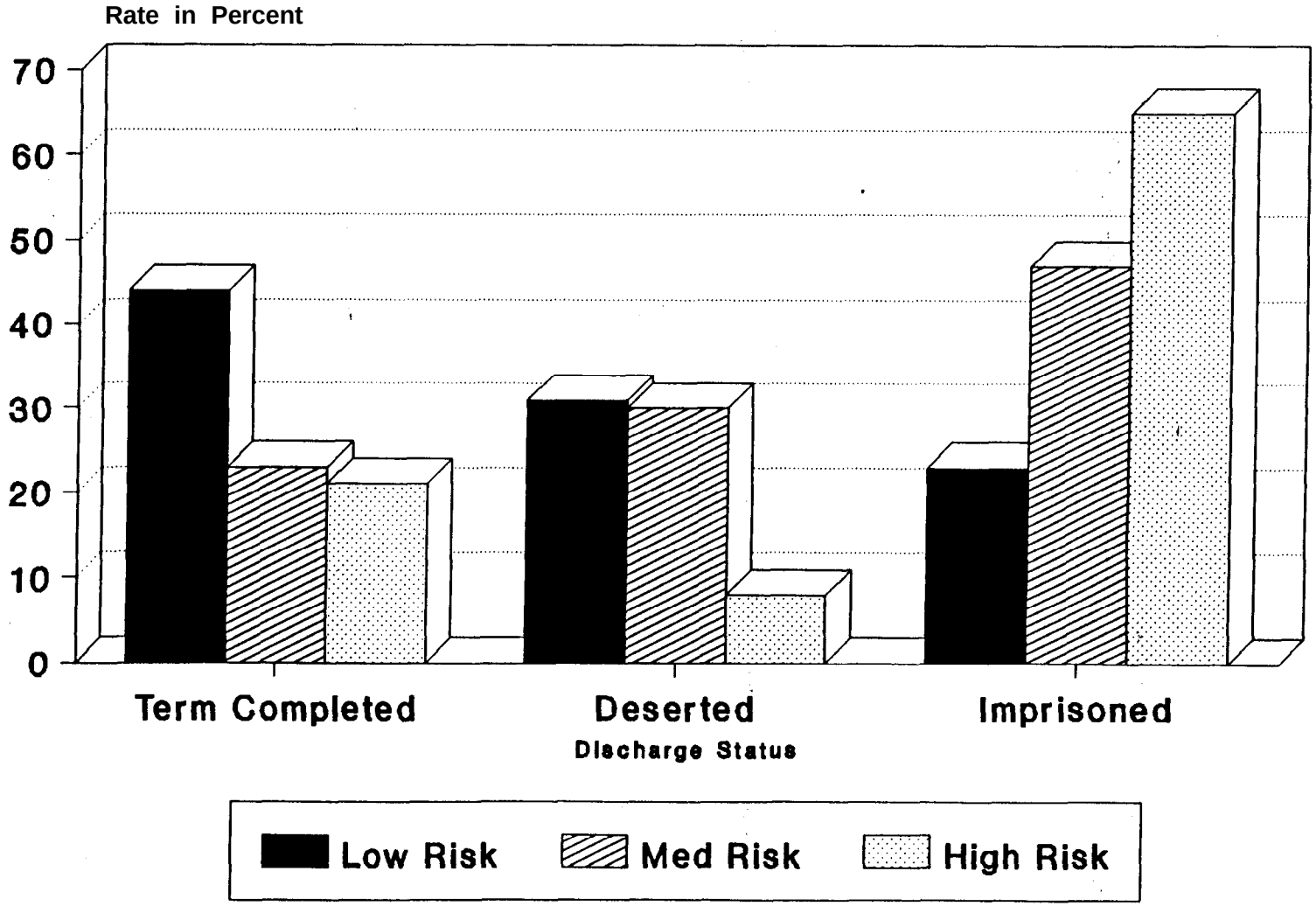
Due to the limited funding, we were not able to gather a larger sample to cover probationers on misdemeanor probation grants. While, we would like to assess the applicability of the Wisconsin system across all segments of our probation population, our major concern in the day-to-day operation is the supervision of probationers that pose a great risk to the community. Thus, the sample was drawn from the pool of felony offenders. The charts following this section represent a general view of major findings of this study.

- As the level of risk goes up, so does the number of probationers with arrests



Percentages have been rounded up

- The Wisconsin system fairly well predicts favorable and unfavorable discharge status of the three risk groups



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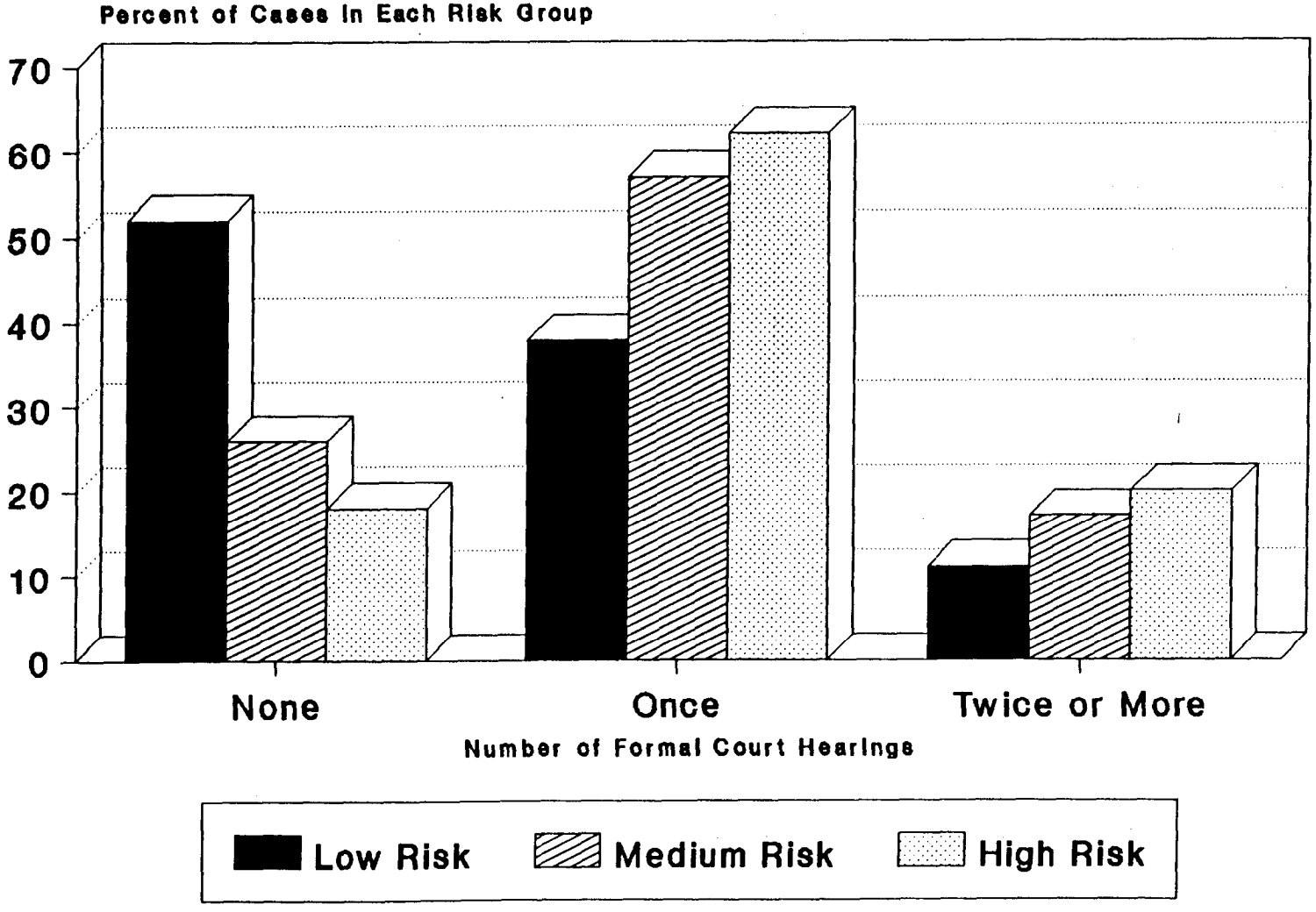
- The higher the risk level, the more probationers with formal court hearings



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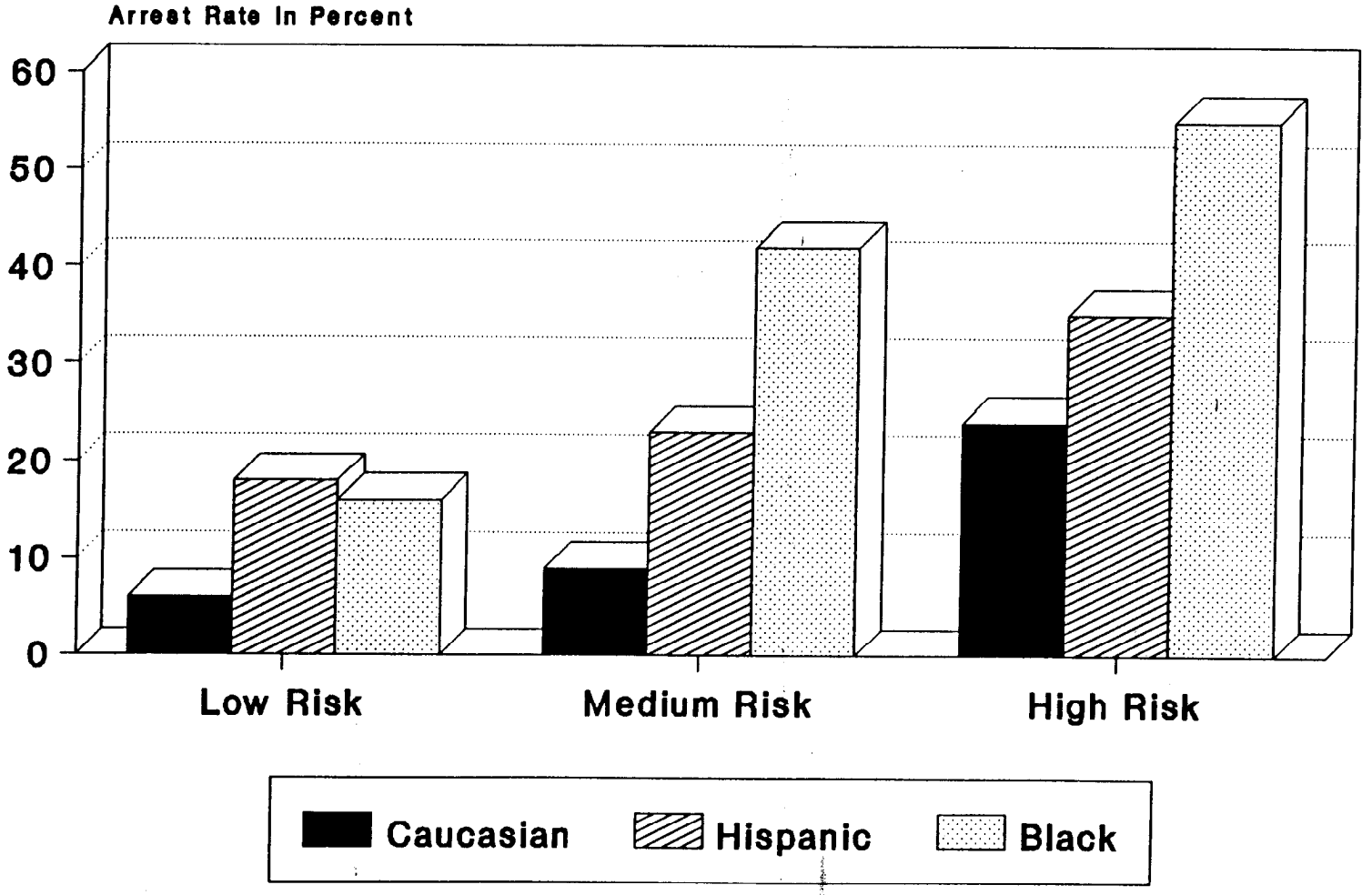
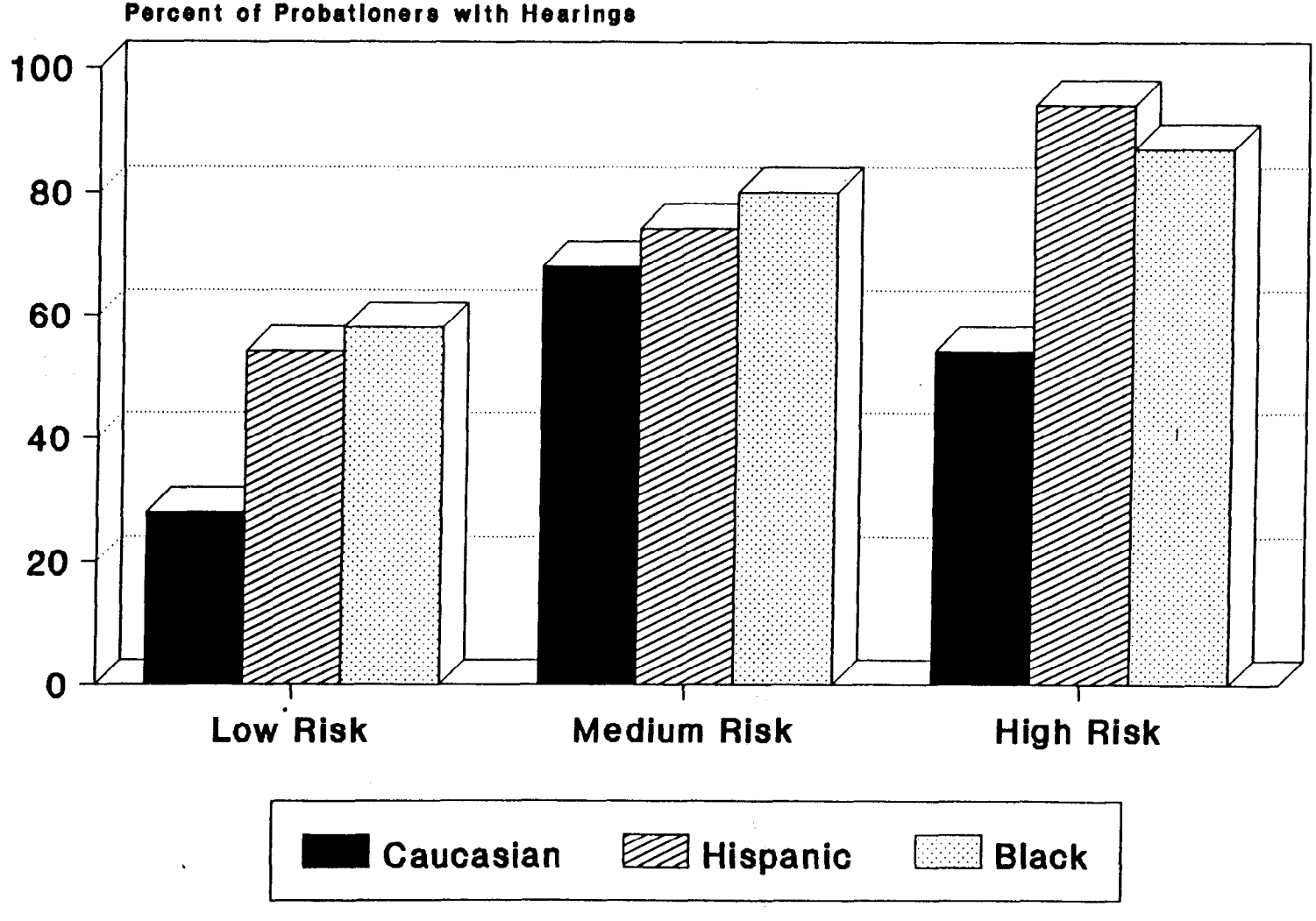
- Caucasian probationers consistently have fewer arrests on each risk level than the other two ethnic groups



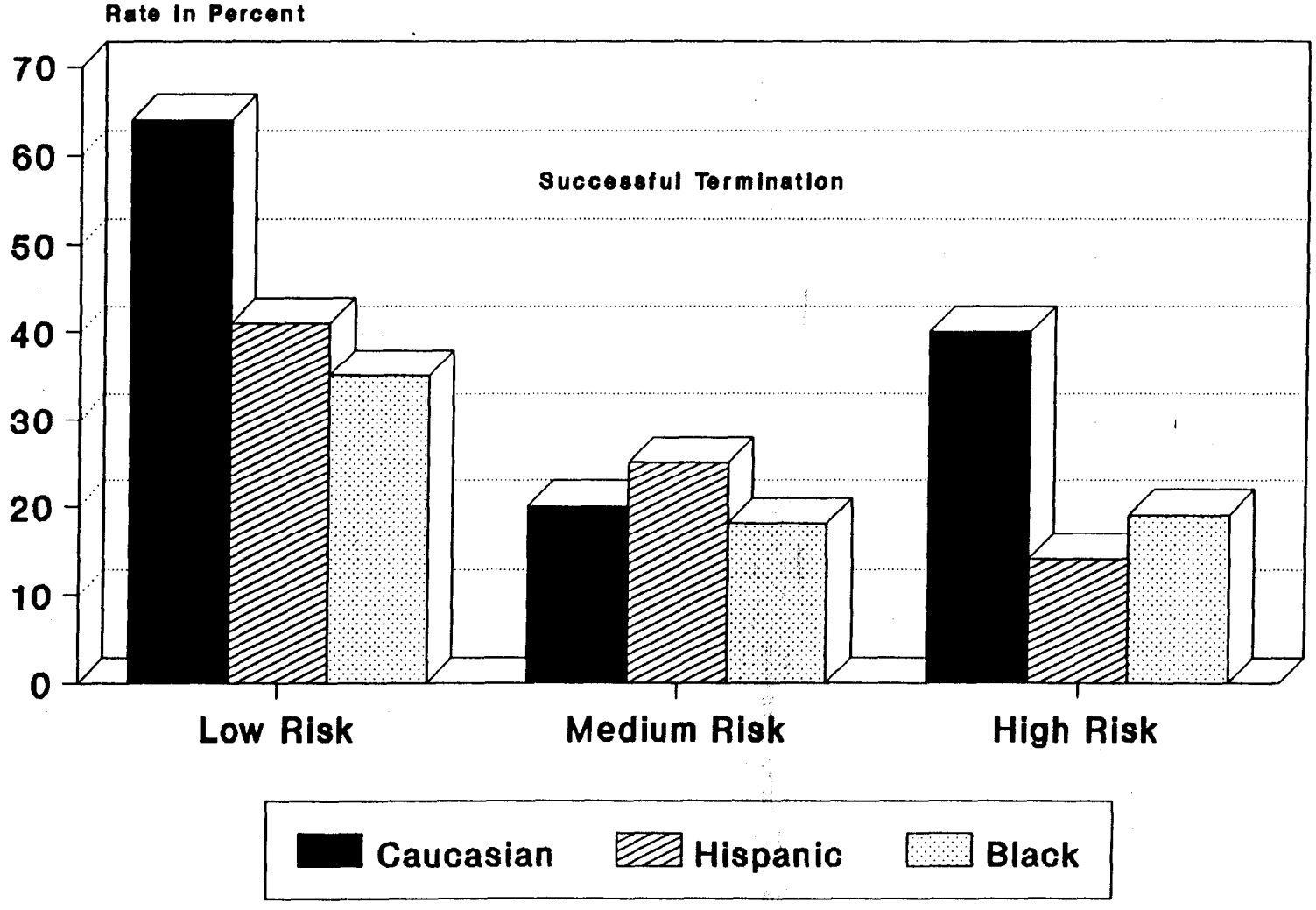
Percentages have been rounded up

- Caucasian probationers consistently' have fewer court hearings than the hispanics and blacks at each risk level



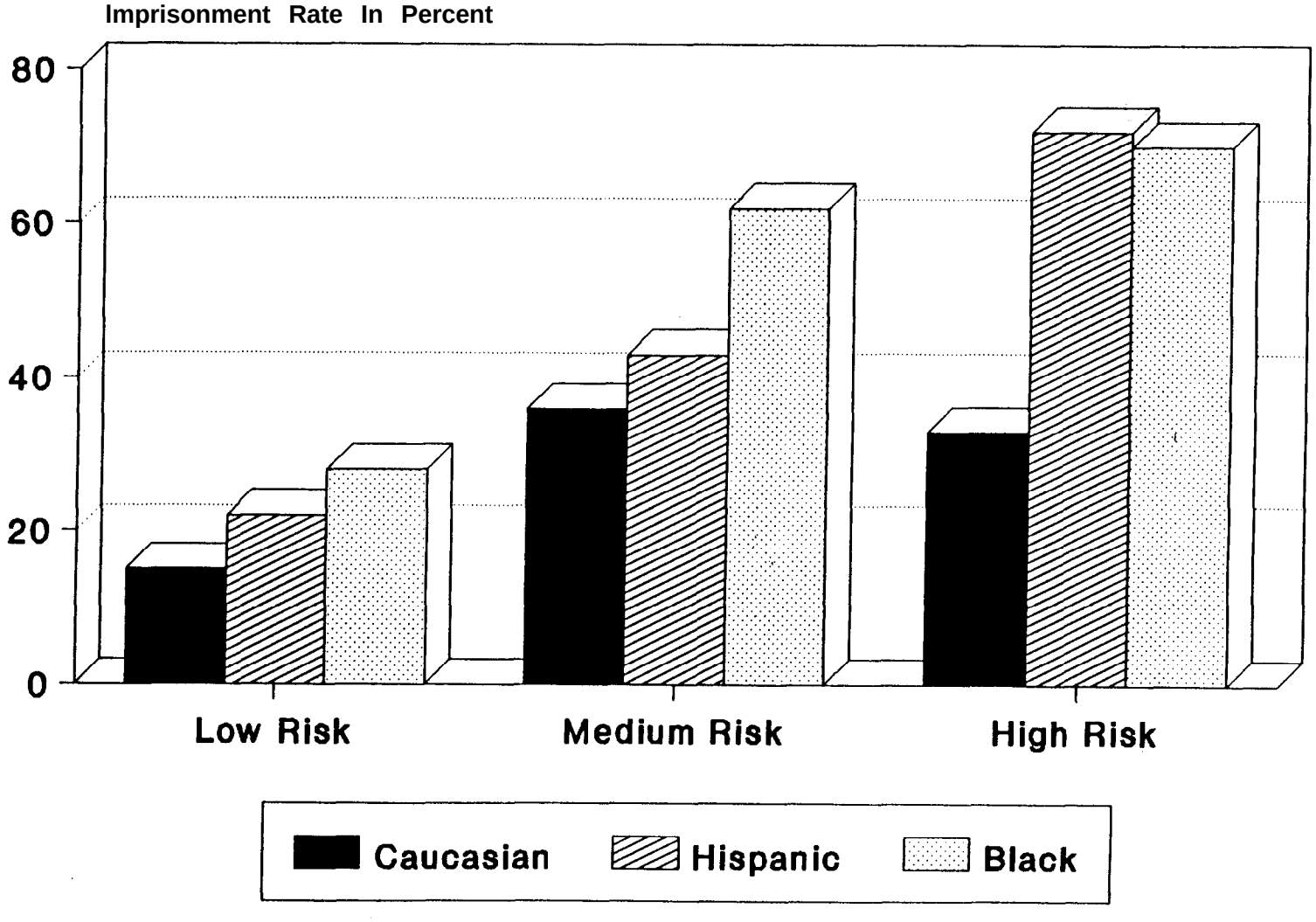
Percentages have been rounded up

- High risk and low risk Caucasians have significantly more successful probation terminations



Percentages have been rounded up

- Imprisonment rates at each risk level are significantly different across the three ethnic groups



Percentages have been rounded up

I. Backaround:

In the fall of 1977, an elaborate research project at a cost of more than one million dollars was undertaken in Wisconsin. The Wisconsin Department of Corrections developed a classification system to assess the probationers' propensity for further criminal conduct and assign them to different levels of supervision. In the following two years, lengthy procedures were taken to evaluate the development and implementation of the system.

The project was considered the most methodologically rigorous caseload study conducted in recent years. The Assessment of needs and risk had a significant influence on the probation outcomes. Intensified contacts with high need/high risk cases resulted in fewer convictions, rule violations, desertions and revocations. At the same time, decreased contacts with low need/low risk probationers did not seem to have perceivable adverse effects.

The Wisconsin system, also known as the NIC system because of its assistance during the development and promotions for other states (See Appendix I), was also effective in predicting success or failure in completing probation terms--low risk cases were revoked at a much lower rate than the high risk ones.

In the early 198Os, Los Angeles County Probation Department adopted the Wisconsin system as a major step to standardize its classification of cases and optimize its resources for supervision. In 1981 the Los Angeles County Probation Department

received a grant from the National Institute of Corrections to monitor and evaluate the implementation of the "Wisconsin System" on a large number of caseloads.

During the study, more than 3,000 adult supervision cases in three area offices (Harbor, Santa Monica and South Central) were classified using the Wisconsin model. The outcomes in the project evaluation validated the risk scale's ability to accurately predict the cases most likely to recidivate. The study demonstrated a significant relationship between risk scores and probability of success or failure on probation (Chi-sguare=75.02, df=2, p<O.001).

The scale was most efficient with cases that were MIN or MAX as it correctly predicted outcomes in 75 percent of those cases. The probability of a favorable outcome increased as the risk score decreased. Cases in the MED range tend to average out against the top and bottom.

After the study, the Wisconsin classification system and the model of differential supervision were expanded throughout the county.

II. Problem Statement:

In recent years, the county has seen a steady increase in its population as well as its ethnic makeup. The demographic change has also reflected upon the Department's probation caseloads. The department now supervises more than 80,000 adult probationers of various ethnicities. More than 70% of them are

felony offenders. The following chart offers a general idea of how the racial composition has changed in the past six years:

Ethnicity	1984	1985	1986	1987	1988	1989
White	35.2%	33.8%	31.8%	31.7%	31.7%	29.7%
Black	34.3%	34.2%	34.8%	34.3%	32.4%	29.4%
Hispanic	28.0%	29.5%	30.9%	31.4%	33.4%	38.0%
Asian-Am	0.6%	0.6%	0.6%	0.6%	0.5%	0.5%
Other	1.9%	1.9%	1.9%	2.0%	2.0%	2.4%
Total	54,795	58,134	62,275	67,195	75,986	80,694

It is noted that the probationers of hispanic origins became the largest ethnic group in the probation population in the last two years while the number of whites has been declining. The number of blacks has remained fairly stable, although they show a slight decline.

While the increase in the department's operational budget is limited by countywide financial constraint, the supervision caseloads have continued to rise steadily. Probation officers now take more cases (260 per DPO on average) than allowed by the standards and cutoff points recommended six years ago when the Wisconsin system was implemented (150 per DPO).

The growth and change of the compositional characteristics of the probation population thus triggered our concern on the continuing use of the same classification system. Is it still a valid instrument and applicable in this geographically

widespread, racially diversified, and highly criminogenic area? Can it still accurately assess probationers propensity, thus improve the cost-effectiveness of our limited resources and direct staff attention away from low-risk cases toward high-risk ones?

With a grant from the National Institute of Corrections, we began, in July, 1989, to reevaluate the effectiveness and appropriateness of the Wisconsin System as it applies to the Los Angeles probation population.

III. Research Hypothesis:

Our primary concern in evaluating the Wisconsin system was to examine the relationships between classified levels of risk and actual probation outcomes and how they varied in different ethnic groups. The probation outcomes in our study consisted of three major components--1) re-arrest on a new felony charge while on probation, 2) formal court hearings due to a violation of probation conditions or new arrest, and 3) discharge status--reasons for leaving probation, which includes successful completion of probation term, death, desertion, and imprisonment., Since a probationer may be arrested while on probation, arraigned for court hearing and sent to prison, the three categories of probation outcomes are not independent of each other in our study. some sampled probationers have been counted once for each category. The study, thus, would not generate an overall view of success or failure rates. Neither would it be possible to make

any comparison across the three outcome categories.

If the Wisconsin system could adequately identify probationers' likelihood of recidivism, the risk levels should positively relate to the unfavorable outcomes, and negatively relate to the favorable outcomes. Ideally the Wisconsin classification system should predict an outcome pattern somewhat like the following:

	Re-arrest	Formal Hearing		Discharge Status	
			Term completed	Deserted	Imprisoned
Low Risk (MIN)	low	low	high	low	low
Medium Risk (MED)	medium	medium	medium	medium	medium
High Risk (MAX)	high	high	low	high	high

IV. Sampling Procedure:

Our study adopted the questionnaires used by the National Association of Criminal Justice Planners (NACJP) in their study of adult felony probationers from 39 selected jurisdictions, including Los Angeles County.

Since majority of our probation population are felony offenders (more than 70%), our primary concern thus centered on how well the Wisconsin system worked on these probationers. We sampled felony offense probationers who received their court sentence in 1986. They were selected from the District Attorney's information system, PROMIS, through a stratified systematic sampling procedure. As a result, our sample had a

fairly good representation of different felony offense categories -- homicide, rape, robbery, aggravated assault, burglary, larceny, drug trafficking, and other felonies.

The risk score was determined by the supervision Deputy Probation Officer (DPO) for each adult sentenced and admitted to probation using the Wisconsin Risk Assessment Scale. The scores were grouped into three categories: O-7 points for low (minimum) risk, 8-14 points for medium risk, and 15 or more for high (maximum) risk.

The original sampling procedure identified 1,250 cases. But only 466 cases have the probation information needed for filling out the questionnaires. Despite the obstacles we encountered during the sampling process, the final sample still provides meaningful information regarding the validity and applicability of the Wisconsin scale.

V. Sample Description:

In our sample, there were 114 Caucasians, 150 Hispanics, 192 Blacks and 10 others. Of the 466 subjects, 190 were classified as low risk probationers, 131 medium risk probationers and 143 were high risk probationers.

By the time we concluded the data collection in August 1989, the sampled subjects were on probation from 43 months for those admitted in January 1984, to 32 months for those admitted in December 1986. The time in supervision may have been shorter for those discharged from probation prior to the date of data

collection.

During their probation period, 22% (104) of the sampled subjects were arrested once on a felony charge while 4% (18) others were arrested more than once on a felony charge. Despite a high percentage of subjects with-no felony arrests, only about one third of them (34%) did not have formal court hearings reported. This indicates a high rate of probation condition violations or misdemeanor arrests for some of those with no felony arrests reported.

The probation violations and felony arrests combined to produce a low rate of successful supervision outcomes among the sample subjects. At the point of termination, 29% of the subjects successfully completed their probation terms, while 45% had their probation grants revoked and sentenced to prison while another 23% were at large after deserting probation. The remaining 3% were in the "Other" category. The high imprisonment rate indicated a high level of close supervision, timely detection and reporting of violations, and removal of violators for the protection of the community.

In the following sections, we would discuss these outcomes in terms of their relations to risk measurement. We would also factor in the subjects' ethnic background to test the racial sensitivity of the Wisconsin classification system.

VI. Statistical Findings:

Chi-square analysis was applied to examine the associations

between the risk levels and the probation outcomes. In applying Chi-square analysis we were primarily interested in the differences we observed in the categories of the contingency tables. Certain cells in these tables contained less than 5 cases, and to achieve a statistically valid test, we collapsed them with other categories of the same measurement. However, we listed the Chi-square values and significance levels from the tests with both collapsed and uncollapsed cells.

1. Risk levels/risk scores vs. number of felony arrests:

We found that about 14% of those in the low risk group were arrested on felony charges during their probation period, whereas more than 24% of the medium risk probationers had felony arrests and 45% in the high risk group were arrested (See Appendix II--Table One). Significantly more low risk probationers had not been arrested on felony charges during their probation period than the medium and high risk probationers.

The Chi-square statistic showed a value of 36.07 at the 0.005 level of significance. Apparently it is not likely that the differences among the categories were due to random errors.

2. Ethnicity vs. felony arrests:

We further examined how the risk levels related to the number of felony arrests among different ethnic groups. The contingency table (See Appendix II--Table Two) showed that the Caucasian probationers had fewer felony arrests (less than 11

percent) than the hispanics (about 23 percent), who in turn had fewer arrests than the blacks (about 38 percent). In other words, in terms of the number of felony arrests, the black probationers stood first, followed by the hispanics and then the Caucasians.

The Chi-square value was 29.80 at the significance level of 0.005, which indicates that significant differences exist among the racial groups.

When comparing the number of arrests within each level of risk across the three ethnic groups, we found that the Caucasian probationers had a consistently lower number of arrests than the other two groups (See Appendix II--Table Three). In the high risk group, 55% of the blacks *were* arrested at least once on a felony charge, compared to 35% among the hispanics and only 24% among the Caucasian probationers. The same pattern was also found in the medium and low risk groups. Our Chi-square tests showed that all the differences among these groups were significant.

Ideally, probationers of a risk level should have the same or similar likelihood of recidivism regardless of their *races,* thus the three ethnic groups on each risk level should have had similar arrest rates.

The fact that the cross-ethnic discrepancies of probation outcomes within the same risk levels were consistent and significant suggests that the Wisconsin system can not adequately measure the variation caused by cultural and ethnic differences

in the probation population.

Besides inter-racial predictability, we also looked at the differences within each ethnic group (See Appendix II-Table Three). The outcome pattern was clear among all the three ethnic groups, which showed that as the level of risk went up, so did the number of felony arrests, or vice versa. There were two deviations from the general pattern--1) none of the high risk Caucasian probationers had been arrested twice, thus leaving the category blank; 2) the differences among the three risk levels of the hispanic probationers were not significant.

3. Risk levels vs. reasons for leaving probation:

There were actually five categories of reasons for leaving probation--those who successfully completed their probation terms, those who died, those who deserted, those who went to prison, and the rest who made up the "other" group.

The results in the contingency table (See Appendix II-Table Four) showed a clear pattern among the three risk groups. The lower the risk level the higher the percentage in successful completion of probation. About 44 percent of those in the low risk group completed their term, 23 percent of the medium risk group finished their term and about 21 percent of the high risk group concluded their probation.

On the other hand, *more* than 65% of the high risk group were sent to prison after their probation grant was revoked, as opposed to 47% of the medium risk probationers and only 23% in

the low risk group. So the higher the risk level, the higher the imprisonment rate.

However, the table also showed that the lower the risk level, the higher the desertion rate. This rate, for instance, was 31% among the low risk probationers, but only about 8% in the high risk group.

Such a high rate of desertion could result from several factors. It might have been the differentiated levels of supervision assigned to the probationers. Those classified as low risk had received minimum or no surveillance. Another reason might be that the risk scale could not adequately predict the likelihood of desertion, *or* desertion of probation might have been a lesser concern for those who constructed the Wisconsin system. Other than the items measuring a probationer's residential mobility and employment, there are no other items that could directly generate any information regarding how likely a probationer is to stay.

Given the differences shown in the contingency table, our Chi-square test gave a Value of 49.754 at 0.005 level of significance, which means these differences are very likely to be real.

4. <u>Risk levels vs. reasons for leaving probation controlling ethnicity:</u>

When we broke down the sampled subjects according to their races and examined how well the Wisconsin system predicted the

probation outcomes within each ethnic group, we found that some of the results deviated from the general pattern discussed above (See Appendix II-Table Five).

As it was stated in the hypotheses, the medium risk probationers should have probation outcomes sandwiched between the low risk group and the high risk group. They should have had a successful outcome rate higher than that of the high risk group but lower than that of low risk group. However, within the Caucasian group, the medium risk group had a higher rate of imprisonment and desertion, and a lower rate in term completion than either of the Caucasian low risk or high risk group.

The Chi-square value was 11.556 with $p<0.025$, an indicator of significant differences. So the pattern depicted in this table, although significant, seemed to run against the expected result of the Wisconsin system.

For the hispanic group (See Appendix II--Table Five), the expected pattern appeared. More probationers (about 41%) in the low risk group successfully completed their probation terms than those in the medium risk group (25%) who in turn outnumbered those in the high risk group (14%). More subjects in the high risk group (72%) were imprisoned than those in the-medium risk group (about 43%), and only about 22% of the low risk group probationers were imprisoned. The black group (See Appendix II-Table Five) also showed a similar pattern.

The Chi-square analyses for both hispanics and blacks showed that the differences among the risk groups were significant. The

Wisconsin Scale predicted fairly well the departure status of those who left probation. Higher risk levels were associated with higher rates of unfavorable outcomes. The pattern was fairly consistent in the whole sample as well as across within each of the three racial groups. It was consistent across the three ethnic groups that the high risk groups had the least desertions, while the desertion rates were highest among the low risk groups, except for the Caucasians.

It was not clear to us as to what result we should expect from the Wisconsin system with regard to desertion of probation, except we know that it does not contain many items for predicting such an outcome. We suspect the level of supervision assigned to each probationer played a more determinant role in its outcome than the risk scores because of the rather consistent pattern in the sample as well as across the three ethnic groups.

5. <u>Risk levels/risk scores vs. number of formal court hearings:</u>

A formal court hearing is initiated against a probationer when the person violates his probation condition or engages in a new criminal conduct. As the contingency table showed (See Appendix II--Table Six) that when the risk level increased, so did the proportion of probationers with formal hearings. The low risk group had the largest number of probationers (52%) with no formal hearings during their probation period, followed by the medium risk group with 26%, then by the high risk cases, with about 18%.

Breaking down the number of formal court hearings (from none, once, to twice or more), we observe a rather consistent pattern that the higher the risk level the larger the number of probationers with court hearings. The differences among the different risk levels were significant.

6. Risk levels/risk scores vs. number of formal court hearings controlling ethnicity:

When looking into the Caucasian group, we found that the medium risk probationers showed a pattern that deviates from the rest of the sample (See Appendix II - Table Seven). It had the largest number of people with court hearings, when it was expected to have more hearings than the low risk group but fewer than the high risk group.

For the hispanic and black probationers, the higher the risk level, the greater the percentage with formal hearings. Chi-square analysis of differences in the three ethnic groups were significant.

VII. Conclusions and suggestions:

Overall, this study showed a general pattern supportive of the findings from the evaluation study in 1983, except for the discrepancies across the ethnic groups. The earlier study did not control for ethnicity. Since our sample consisted of only felony cases, we could only say that the Wisconsin system was fairly accurate in predicting probation outcomes for the selected

sample.

It seemed that the system had classified more Caucasian probationers than necessary to higher levels of risk. The consistent pattern of a lower number of arrests and formal court hearings, and a higher rate of successful completion of probation terms among Caucasian probationers than that of the hispanics and blacks among the high risk group indicated that many of them could have been assigned to less supervision. In other words, some of our staff attention and resource could have been directed elsewhere.

The system seemed to best predict for black probationers, whose probation outcomes best resembled that of the sample pattern. The other two groups all had unusual patterns. For instance, among hispanics, the differences between the risk levels and the number of arrests were not significant. The fact that the cross-ethnic discrepancies of probation outcomes within same risk levels were rather consistent and significant suggests that the Wisconsin system can not adequately measure the variation cause by cultural and ethnic differences in the probation population. Such items deserve serious consideration and study, and should be factored into any future construction of risk scales, should we have such opportunities.

We cannot infer anything further for the misdemeanor probation population from what we saw in this sample due to the limitations of descriptive statistics as well as our limited sample.

Apparently, the Wisconsin classification system focuses more on the personal traits of a probationer, while we believe that attributes of supervision areas also play an important role in recidivism. Area attributes include crime rates, drug arrest rates by type of drug, housing crowdedness, gang prevalence, and ethnic subcultures, neighborhood attributes and ethnic subcultures can be just as important in predicting a probationer's propensity as the measurement of his personal traits.

Further studies should be carried out to include larger samples and offenses in order to fully evaluate the reliability and applicability of the Wisconsin scale. We also suggest that future studies should move from a dichotomous outcome variable (success/failure) to a continuous one ranging from success with no violation, to conviction for a new offense (less or more severe) with revocations and minor violations falling in between. The only variables in our data set that indicated some continuity are the number of felony arrests and formal hearings during the probation period: They helped indicate the propensity of the probationers as rated by the scale: however, it could not tell the degree of the propensity -- more severe or less.

The length of time between the beginning of probation and the first new offense should also be recorded for all probation violators. The time element will add another dimension to the continuous outcome measurement. It is our belief that a valid' assessment of propensity and appropriate level of supervision

should postpone recidivism for high risk probationers.

We also suggest that future study should control for time at risk by establishing a uniform follow-up period such as one or two years. This would reduce the influence of differing sentence lengths and place a constant factor of time on all cases.

As the probation population continue to grow and its ethnic makeup continue to diversify, sooner or later we will face the challenge of modifying the Wisconsin Scale or developing a new classification system that will adequately classify cases and recommend appropriate levels of supervision for probationers in this multi-ethnic, highly criminogenic urban area.

APPENDIX I

RISK ASSESSMENT

NAME -- LAST, FIRST		PROB. NO.	DPO	CL NO.	AO
		X-			
DATE OF GRANT	**EXPIRATION**	**DATE OF ASSESSMENT**	**BY**		

		SCORE
Number of Address Changes in Last 12 Months: (Prior to the offense)	0 None 2 One 3 Two or more	
Percentage of Time Employed in Last 12 Months: (Prior to the offense)	0 60% or more 1 40% – 59% 2 Under 40% 0 Not applicable	
Alcohol Usage Problems: (Prior to the offense)	0 No interference with functioning 2 Occasional abuse; some disruption of functioning 4 Frequent abuse; serious disruption; needs treatment	
Other Drug Usage Problems: (Prior to the offense)	0 No interference with functioning 1 Occasional abuse; some disruption of functioning 2 Frequent abuse; serious disruption; needs treatment	
tude:	0 Motivated to change; receptive to assistance 3 Dependent or unwilling to accept responsibility 5 Rationalizes behavior; negative; not motivated to change	
Age at First Conviction: (or Juvenile Adjudication)	0 24 or older 2 20 – 23 4 19 or younger	
Number of Prior Periods of Probation/Parole Supervision: (Adult or Juvenile)	0 None 4 One or more	
Number of Prior Probation/Parole Revocations: (Adult or Juvenile)	0 None 4 One or more	
Number of Prior Felony Convictions: (or Juvenile Adjudications)	0 None 2 One 4 Two or more	
Convictions or Juvenile Adjudications for: (Include current offense.)	2 Burglary, theft, auto theft, or robbery	
Convictions or Juvenile Adjudications for: (Include current offense.)	3 NSF checks or forgery	
	TOTAL	

APPENDIX II

Contingency Tables with Chi-Square Analysis

Table One
Risk Levels by Number of Felony Arrests

Risk levels	Number of felony arrests			
	0	1	2	Total
Low risk	163 (86.2%)	21 (11.1%)	5 (2.6%)	189 (100%)
Med risk	98 (75.4%)	27 (20.8%)	5 (3.8%)	130 (100%)
High risk	78 (54.9%)	56 (39.4%)	8 (5.6%)	142 (100%)
Total	339	104	18	461

Chi-square value = 36.072; df = 4; p < 0.005.

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Table Two
Number of Felony Arrests by Ethnicity

Ethnicity arrests	Number of felony			
Total	0	1	2	
Caucasian	101 (89.4%)	10 (8.8%)	2 (1.8%)	113 (100%)
Hispanic	114 (76.5%)	29 (19.5%)	6 (4.0%)	149 (100%)
Black	118 (61.5%)	64 (33.3%)	10 (5.2%)	192 (100%)
Total	333	103	18	454

Chi-square value = 29.799; df = 4; p < 0.005.

Table Three
Risk Levels by Felony Arrests-Controlling Ethnicity

Risk levels	Number of felony arrests			
	0	1	2	Total
Caucasian				
Low risk	51 (94.4%)	2 (3.7%)	1 (1.9%)	54 (100%)
Med risk	31 (91.2%)	2 (5.9%)	1 (2.9%)	34 (100%)
High risk	19 (76.0%)	6 (24.0%)	0 (0.0%)	25 (100%)
Chi-square value = 3.625; df = 2; p<0.05; Chi-square was computed with Column 1 and 2 combined to obtain enough cases in cells.				
Hispanic				
Low risk	50 (82.0%)	10 (16.4%)	1 (1.6%)	61 (100%)
Med risk	41 (77.0%)	10 (18.9%)	2 (3.8%)	53 (100%)
High risk	22 (64.7%)	9 (26.5%)	3 (8.8%)	34 (100%)
Chi-square value = 3.625; df = 2; p<0.20* Chi-square was computed with Column 1 and 2 combined to obtain enough cases in cells.				
Black				
Low risk	57 (83.8%)	8 (11.8%)	3 (4.4%)	68 (100%)
Med risk	24 (58.5%)	15 (36.6%)	2 (4.9%)	41 (100%)
High risk	37 (44.6%)	41 (49.4%)	5 (6.0%)	83 (100%)
Chi-square value = 24.494; df = 2; p<0.005; Chi-square was computed with Column a and 2 combined to obtain enough cases in cells.				
Total	332	103	18	453

Chi-square value = 70.535; df = 16; p <0.005;
--Column 1 and 2 not combined.

Chi-square value = 65.425; df = 8; p<0.005;
--Column 1 and 2 combined.

Table Four
Risk Levels by Reasons for Leaving Probation

	Term completed	Died	Absconded	Prison	Other	Total
Low risk	47(43.5%)	1(0.9%)	33(30.6%)	25(23.1%)	2(1.9%)	108
Med risk	23(22.8%)	1(1.0%)	30(29.7%)	47(46.5%)	0(0.0%)	101
High risk	22(20.6%)	2(1.9%)	8(7.5%)	70(65.4%)	5(4.7%)	107
Total	92	4	71	142	7	316

Chi-square value for all cells = 55.125; df = 8; $p<0.005$.

Chi-square value = 49.754; df = 4; $p<0.005$; -- With "Died" column and "Other" column deleted to avoid cells with insufficient cases for the Chi-square test.

Table Five
Risk Levels by Reasons for Leaving Probation and Ethnicity

	Term completed	Died	Absconded	Prison	Other	Total
Caucasian						
Low risk	17(63.0%)	0(0.0%)	6(22.2%)	4(14.8%)	0(0.0%)	27
Med risk	5(20.0%)	0(0.0%)	11(44.0%)	9(36.0%)	0(0.0%)	25
High Risk	6(40.0%)	1(6.7%)	2(13.3%)	5(33.3%)	1(6.7%)	15
Chi-square value = 11.556; df = 4; p<0.025; "Died" and "Other" columns were not included in the Chi-square test.						
Hispanic						
Low risk	15(40.5%)		14(37.8%)	8(21.6%)		37
Med risk	10(25.0%)		13(32.5%)	17(42.5%)		40
High risk	4(13.8%)		4(13.8%)	21(72.4%)		29
Chi-square value = 17.505; df = 4; p<0.005; "Died" and "Other" columns were not included in the Chi-square test.						
Black						
Low risk	14(35.0%)	1(2.5%)	12(30.0%)	11(27.5%)	2(5.0%)	40
Med risk	6(17.6%)	1(2.9%)	6(17.6%)	21(61.8%)	0(0.0%)	34
High risk	12(19.0%)	1(1.6%)	2(3.2%)	44(69.8%)	4(6.3%)	63
Chi-square value = 24.048; df = 4; p<0.005; "Died" and "Other" columns were not included in the Chi-square test.						

Table Six
Risk Levels/Risk Scores by Number of Formal Hearings

	Number of formal hearings 0	1	2	3 or more	Total
Low risk	98(51.9%)	71(37.6%)	16(8.5%)	4(2.1%)	189
Med risk	34(26.2%)	74(56.9%)	19(14.6%)	3(2.3%)	130
High risk	25(17.6%)	88(62.0%)	26(18.3%)	3(2.1%)	142
Chi-square value for all cells = 52.499; df = 10; p<0.005. Chi-square value = 42.618; df=4; p<0.005; with Column w and 3 combined to avoid cells with insufficient cases.					

Table Seven
Risk Levels/Risk Scores vs. Number of Formal Hearings
-- by Ethnicity

	Number of hearings 0	1	2	3 or more	Total
Caucasian					
Low risk	39(72.2%)	13(24.1%)	2(3.7%)		54
Med risk	11(32.4%)	22(64.7%)	1(2.9%)		34
High risk	12(46.2%)	11(42.3%)	3(11.5%)		26

Chi-square value = 14.284; df = 2; p<0.005; with Column 1 and 2 combined.

Hispanic					
Low risk	28(45.9%)	28(45.9%)	5(8.2%)	0(0.0%)	61
Med risk	14(26.4%)	32(60.4%)	6(11.3%)	1(1.9%)	53
High risk	2(5.9%)	23(67.6%)	8(23.5%)	1(2.9%)	34

Chi-square value = 19.395; df = 4; p<0.005; with Column 2 and 3 combined.

Black					
Low risk	28(41.8%)	29(43.3%)	7(10.4%)	3(4.5%)	67
Med risk	8(19.5%)	19(46.3%)	12(29.3%)	2(4.9%)	41
High risk	11(13.4%)	54(65.9%)	15(18.3%)	2(2.4%)	82

Chi-square value = 21.014; df = 4; p<0.005; with Column 2 and 3 combined.